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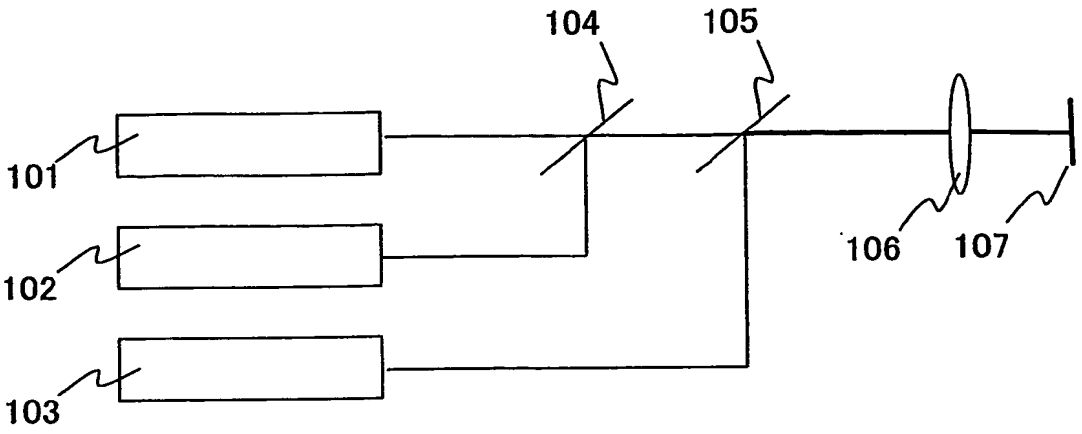
(54) Title: LASER IRRADIATION METHOD, LASER IRRADIATION APPARATUS, AND METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE



(57) Abstract: The present invention is to provide a technique that can increase productivity with high output power by combining a plurality of laser beams on an irradiation surface without any difficulties in optical alignment. According to this technique, laser beams having different wavelengths are combined using a plurality of laser oscillators and a dichroic mirror, or additionally a polarizer. For example, a first laser beam emitted from a first laser oscillator is combined with a second laser beam emitted from a second laser oscillator having different wavelength from the first laser beam in such a way that the first laser beam passes through a dichroic mirror and the second laser beam is reflected on the dichroic mirror, and the combined laser beam is projected to an irradiation surface.

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